

REMARKS

Claims 1-25 are pending in this application. Claims 1-25 stand rejected. No new matter has been added. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1, 3, 5, 6, 8, 10, 12, 14, 15, 17, 19, 20, 23 and 25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,787,777 (Gagnon) in view of U.S. Patent 6,928,142 (Shao), and further in view of U.S. Patent No. 7,011,814 (Suddarth). Claims 2, 4, 7, 11, 13, 16, 21, 22, and 24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Gagnon in view of Shao, further in view of Suddarth, and further in view of U.S. Patent No. 6,490,476 (Townsend). Claims 9 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Gagnon in view of Shao, further in view of Suddarth, and further in view of U.S. Patent No. 6,597,762 (Ferrant). Applicants respectfully traverse these rejections for at least the reasons set forth hereafter.

Claim 1, as amended, recites a method for analyzing at least one abnormality of an object, wherein the method comprises “obtaining a first image containing an abnormality using a first modality...obtaining a second image containing the abnormality using a second modality...selecting a first region of interest located within the first image...determining an anatomical size of the abnormality based on the first region of interest in the first image...determining a relative metabolic activity based on a second region of interest within the second image...and determining a specific metabolic activity within the first region of interest of the first image using the relative metabolic activity within the second region of interest of the second image and the anatomical size of the first region of interest of the first image.

None of Gagnon, Shao, or Suddarth, considered alone or in combination, describe a method as recited in claim 1. For example, none of Gagnon, Shao, or Suddarth, considered alone or in combination, describe determining a specific metabolic activity within a first region of interest of a first image using a relative metabolic activity within a second region of interest of a second image and an anatomical size of the first region of interest of the first image. Gagnon describes the combination, or fusing, of a functional emission image with a structural

transmission image to provide a diagnostician with a combined image. However, Gagnon does not describe using an anatomical size of a first region of interest in the structural or functional image in combination with a relative metabolic activity determined from a second region of interest in the other image to determine a specific metabolic activity within the first region of interest. Rather, Gagnon describes fusing structural and functional images by correcting the functional image with the correction factors determined from the structural image. Neither Shao nor Suddarth, considered alone or in combination, make up for the deficiencies of Gagnon. Rather, Shao is merely cited by the Examiner for describing the manual selection of a region of interest and merely describes comparing new metabolic activity data to old data (threshold data from population norms or normal or tumor data taken on the subject previously) to evaluate the metabolic data or a tumor prior to or after a therapeutic treatment.

Accordingly, because Gagnon, Shao, and Suddarth each individually fail to describe or suggest one or more elements of independent claim 1, a combination of Gagnon, Shao, and Suddarth cannot describe or suggest such element(s). Independent claim 1 is therefore submitted to be patentable over Gagnon in view of Shao, and further in view of Suddarth.

Neither Townsend nor Ferrant, considered alone or in combination, make up for the deficiencies of the combination of Gagnon, Shao, and Suddarth with respect to claim 1.

Claim 5 depend from independent claim 1 and has been amended to further recite “wherein determining a specific metabolic activity comprises determining the specific metabolic activity based at least in part on a difference between the sizes of the first region of interest and the second region of interest. None of the cited references, considered alone or in combination, describes the recitations of amended claim 5. Claim 5 is therefore submitted to contain additional recitations to independent claim 1 that are patentable over the cited references.

Independent claims 10, 19, 20, and 25 are submitted to be patentable over the cited art for at least the reasons set forth above with respect to independent claim 1.

It is further submitted that the dependent claims contain additional recitations that are not anticipated nor rendered obvious by the cited references.

In view of the foregoing amendments and remarks, it is respectfully submitted that the prior art fails to teach or suggest the claimed invention and all of the pending claims in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'CHL', written over a horizontal line.

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